

# AI-102T00: Designing and Implementing a Microsoft Azure AI Solution

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## Course Description

AI-102 Designing and Implementing an Azure AI Solution is intended for software developers wanting to build AI infused applications that leverage Azure Cognitive Services, Azure Cognitive Search, and Microsoft Bot Framework. The course will use C# or Python as the programming language

## Course Duration

4 days

## Prerequisites

Before attending this course, students must have:

- Knowledge of Microsoft Azure and ability to navigate the Azure portal
- Knowledge of either C# or Python
- Familiarity with JSON and REST programming semantics

To gain C# or Python skills, complete the free [Take your first steps with C#](#) or [Take your first steps with Python](#) learning path before attending the course.

If you are new to artificial intelligence, and want an overview of AI capabilities on Azure, consider completing the [Azure AI Fundamentals](#) certification before taking this one.

## Course Outline

- Prepare to develop AI solutions on Azure
- Create and consume Cognitive Services
- Secure Cognitive Services.
- Monitor Cognitive Services
- Deploy cognitive services in containers
- Extract insights from text with the Language service
- Translate text with the Translator service
- Create speech-enabled apps with the Speech service
- Translate speech with the speech service
- Build a Language Understanding model
- Publish and use a Language Understanding app
- Build a question answering solution
- Create a bot with the Bot Framework SDK
- Create a Bot with the Bot Framework Composer
- Analyze images
- Analyze video
- Classify images
- Detect objects in images
- Detect, analyze, and recognize faces
- Read Text in Images and Documents with the Computer Vision Service

- Extract data from forms with Form Recognizer
- Create an Azure Cognitive Search solution
- Create a custom skill for Azure Cognitive Search
- Create a knowledge store with Azure Cognitive Search

## Who Should Attend

Software engineers concerned with building, managing, and deploying AI solutions that leverage Azure Cognitive Services, Azure Cognitive Search, and Microsoft Bot Framework. They are familiar with C# or Python and have knowledge on using REST-based APIs to build computer vision, language analysis, knowledge mining, intelligent search, and conversational AI solutions on Azure.